

# Energy Efficiency and Electric Infrastructure in the State of Vermont

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In any given state, there are a range of stakeholders well-positioned to contribute to the design and delivery of effective energy efficiency programming. This factsheet provides an overview of relevant entities in the state of Vermont, along with highlights of state policies and practices related to energy efficiency. The entity types described and highlighted below are typically involved in electricity and/or energy efficiency related matters in states. Other important stakeholders such as trade associations, industry, and local businesses are not included as they vary significantly from state to state.

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## Electric Market Overview

### Electric Utilities

Privately- and publicly-owned electric utilities generate, transmit, distribute, and/or sell electricity primarily for use by the public. These include investor-owned electric utilities, municipal and state utilities, Federal electric utilities, and rural electric cooperatives.<sup>1</sup> The following summarizes electric utilities in Vermont by type:

- *Investor-Owned Electric Utilities:*  
Green Mountain Power Corporation: <http://www.greenmountainpower.com/>
- *Municipally-Owned/ Publicly-Owned Utilities:* Vermont has 14 municipally- or publicly-owned electric systems in the state
- *Member-Owned (Electric Cooperative):* Vermont has 2 distribution electric cooperatives
- *Other:* 1 Political Subdivision; 2 Transmission Organizations<sup>2</sup>

*Electric utility service areas (as available):* <http://www.greenmountainpower.com/upload/photos/201ServiceMapLarge.jpg>

### Status of Electric Industry Restructuring

Vertically integrated utilities are responsible for generation, transmission and distribution of power to customers. In the 1990's, many states began to unbundle the electricity supply and distribution functions of investor-owned utilities on the theory that only the wires (the fixed network system) constituted a natural monopoly, while the generation of power did not. In states that have undergone restructuring, individual retail customers can choose their supplier but still receive delivery over the power lines of the local utility.<sup>3</sup>

- Vermont does not have a restructured electric industry; investor-owned utility is vertically integrated.  
<http://www.eia.gov/electricity/policies/restructuring/vermont.html>

### Regional Transmission Organization (RTO)/Independent System Operator(ISO)

About 60% of U.S. electric power supply is managed by RTOs or ISOs: independent, membership-based organizations that ensure reliability and usually manage the regional electric supply market for wholesale electric power. In the rest of the country, electricity systems are operated by individual utilities or utility holding companies. RTOs/ISOs engage in long-term planning that involves

<sup>1</sup> Source: EIA

<sup>2</sup> Sources: EIA 2013 Form EIA-861 Utility Data (<http://www.eia.gov/electricity/data/eia861/>) and Vermont Public Service Board (<http://psb.vermont.gov/utilityindustries/electric/industryinfo>)

<sup>3</sup> Source: The Regulatory Assistance Project (RAP)

identifying effective, cost-efficient ways to ensure grid reliability and system-wide benefits. Coordination and cooperation between utilities, state PUCs and RTOs/ISOs is often required to advance energy efficiency goals.<sup>4</sup>

- Vermont is part of the New England ISO (ISO-NE): <http://www.iso-ne.com/>

## Utility Oversight and Planning

### Utility Oversight

Public utility commissions (PUCs) oversee goals, investments, and ratemaking for investor-owned electric utilities. Most of this oversight is conducted via specific regulatory proceedings. Municipally-owned utilities are governed by a local city council or an elected commission, and member-owned/cooperative utilities are governed by a board elected by members. In a few states, PUCs have oversight over some aspects of municipally and member-owned utility performance such as energy efficiency resource standards.<sup>5</sup>

- The Public Service Board is a three member, quasi-judicial board that supervises the rates, quality of service, and overall financial management of Vermont's public utilities: electric, gas, telecommunications and private water companies.  
<http://psb.vermont.gov/>

### Integrated Resource/Procurement Planning

Integrated resource plans (IRPs) are utility plans for meeting forecasted annual peak and energy demand through a portfolio of supply-side and demand-side resources over a specified future period. As of early 2015, integrated resource planning is required or present in more than 30 states, including most vertically integrated/non restructured states. In states that are restructured, regulated distribution-only utilities may be required to develop procurement plans to service customers that do not choose a competitive retail supplier. Energy efficiency is considered as a demand-side resource but the degree to which it is included in resource/procurement planning is influenced by other factors including policies such as Energy Efficiency Resource Standards or requirements that all cost effective energy efficiency be considered.<sup>6</sup>

- Barton Village, Inc. Electric Department's most recent IRP (currently under review in Docket 7359):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270bartonfnl.pdf>
- City of Burlington Electric Department's most recent IRP: <http://psb.vermont.gov/sites/psb/files/orders/2013/2013-07/7979FinalOrder.pdf> and <http://psb.vermont.gov/sites/psb/files/orders/2015/2015-07/8397%20Final%20Order.pdf>
- Central Vermont Public Service Corporation's most recent IRP (currently under review in Docket 7836):  
<http://psb.vermont.gov/sites/psb/files/orders/2010/7284FinalOrder.pdf>
- Village of Enosburg Falls Water & Light Department, Inc.'s most recent IRP (currently under review in Docket 7360):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270Enosburgfnl.pdf>
- Green Mountain Power Corporation's most recent IRP (currently under review in Docket 8397):  
<http://psb.vermont.gov/sites/psb/files/orders/2012/2012-3/7748%20final.pdf>
- Town of Hardwick Electric Department's most recent IRP (currently under review in Docket 7361):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270hardwickfnl.pdf>
- Village of Hyde Park Electric Department's most recent IRP (currently under review in Docket 7362):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270HydeParkfnl2.pdf>
- Village of Jacksonville Electric Company's most recent IRP (currently under review in Docket 7363):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270Jacksonvillefnl2.pdf>
- Village of Johnson Water & Light Department's most recent IRP (currently under review in Docket 7364):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270Johnsonfnl.pdf>
- Village of Ludlow Electric Light Department's most recent IRP (currently under review in Docket 7365):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5825fnl.pdf>
- Village of Lyndonville Electric Department's most recent IRP (currently under review in Docket 7366):  
<http://psb.vermont.gov/sites/psb/files/orders/1996/5270Lyndonvillefnl2.pdf>

<sup>4</sup> Source: [EPA Energy and Environment Guide to Action](#)

<sup>5</sup> Sources: [EPA Energy and Environment Guide to Action](#) and RAP

<sup>6</sup> Source: [EPA Energy and Environment Guide to Action](#)

- Village of Morrisville Water & Light Department's most recent IRP (currently under review in Docket 7367): <http://psb.vermont.gov/sites/psb/files/orders/1997/5270Morrisvillefnl.pdf>
- Village of Northfield Electric Department's most recent IRP (currently under review in Docket 7368): <http://psb.vermont.gov/sites/psb/files/orders/1996/5822fnl.pdf>
- Village of Orleans Electric Department's most recent IRP (currently under review in Docket 7369): <http://psb.vermont.gov/sites/psb/files/orders/1996/5270Orleansfnl.pdf>
- Town of Stowe Electric Department's most recent IRP (currently under review in Docket 7371): <http://psb.vermont.gov/sites/psb/files/orders/1996/5270Stowefnl2.pdf>
- Swanton Village Inc. Electric Department's most recent IRP (currently under review in Docket 7372): <http://psb.vermont.gov/sites/psb/files/orders/1996/5270Swantonfnl2.pdf>
- Vermont Electric Cooperative, Inc.'s most recent IRP: <http://psb.vermont.gov/sites/psb/files/orders/2012/2012-10/7828Final.pdf>
- Washington Electric Cooperative, Inc.'s most recent IRP (next IRP to be filed March 31, 2017): <http://psb.vermont.gov/sites/psb/files/orders/2014/2014-12/8181%20Final%20Order.pdf>

## Statewide Planning Process

States sometimes undertake executive or legislatively driven statewide energy planning processes. These plans may be completely independent of utilities or may explicitly engage utilities.

- Vermont Comprehensive Energy Plan 2015 Update 2015: [http://publicservice.vermont.gov/publications/energy\\_plan/2015\\_plan](http://publicservice.vermont.gov/publications/energy_plan/2015_plan)

## Energy Efficiency Potential Studies

Energy efficiency potential studies determine the amount of technical, economic, and achievable potential for energy efficiency in a region, state, or utility service territory. Energy efficiency potential studies may be undertaken by state agencies or energy efficiency advocacy organizations, or by utilities as part of or to inform compliance with a regulatory requirement. The following are recent energy efficiency potential studies:

- Alternative 20-Year Electric Energy Efficiency Scenarios VEIC Analysis and Recommendations <http://psb.vermont.gov/sites/psb/files/projects/EEU/drp/VEIC-EEDRPAAlternativeScenariosNarrative4-8-11.pdf>
- 2011 Electric Energy Efficiency Potential for Vermont: [http://publicservice.vermont.gov/sites/psd/files/Topics/Energy\\_Efficiency/Energy%20Efficiency%20Potential%202011.pdf](http://publicservice.vermont.gov/sites/psd/files/Topics/Energy_Efficiency/Energy%20Efficiency%20Potential%202011.pdf)
- 2013 Vermont Energy Efficiency Potential Study Update Final Report: [http://publicservice.vermont.gov/sites/psd/files/Topics/Energy\\_Efficiency/2013%20VT%20Energy%20Efficiency%20Potential%20Study%20Update\\_FINAL\\_03-28-2014.pdf](http://publicservice.vermont.gov/sites/psd/files/Topics/Energy_Efficiency/2013%20VT%20Energy%20Efficiency%20Potential%20Study%20Update_FINAL_03-28-2014.pdf)
- From Potential to Action; How New England Can Save Energy, Cut Costs, and Create a Brighter Future with Energy Efficiency, NEEP 2010: [http://www.neep.org/sites/default/files/resources/From%20Potential%20to%20Action\\_0.pdf](http://www.neep.org/sites/default/files/resources/From%20Potential%20to%20Action_0.pdf)
- Vermont Electric Energy Efficiency Potential Study Final Report (2006): <http://www.state.vt.us/psb/document/ElectricInitiatives/FinalReport-05-10-2006.doc>

## Energy Efficiency Policies/Activities

### Statewide Clean Energy Policy/Energy Efficiency Energy Resource Standard(s)

Energy efficiency resource standards (EERSs) require obligated parties—usually regulated retail distributors of electricity—to meet a specific portion of their electricity demand through energy efficiency. As of March 2015, 27 states have some type of energy efficiency requirement or goal.<sup>7</sup>

- Vermont has a mandatory energy efficiency resource standard, including average incremental targets of 2.1% for electric.

<sup>7</sup> Ibid.

## Current Utility-Administered Energy Efficiency Programs

Energy efficiency is regarded as an important utility resource with co-benefits that include reducing air pollution, saving customers on utility bills, and creating local jobs. While the majority of large-scale energy efficiency programs are funded by utility ratepayers, program administration may be by the utility, the state, an independently awarded program administrator or a combination of entities. Below are available links related to rate-payer funded energy efficiency programs offered in the state<sup>8</sup>:

- Vermont is and has been among the leading states for utility energy efficiency for many years and was the first to create a statewide "energy efficiency utility". Under Vermont's 12-year "Order of Appointment" model, Efficiency Vermont and Burlington Electric Department deliver both electric and unregulated heating-and-process-fuel energy efficiency services to residential and business consumers throughout the state.  
<http://database.aceee.org/state/vermont#sthash.qwclFVZD.dpuf>
- *Program Administrator:* Green Mountain Power Corporation:  
Most recent program filing: <http://psb.vermont.gov/sites/psb/files/projects/EEU/drp2013/Budget%20Order.pdf>  
ENERGY STAR Partner since 1997
- *Program Administrator:* Efficiency Vermont: <https://www.efficiencyvermont.com/>  
Most recent program filing: [http://psb.vermont.gov/sites/psb/files/EEU/EfficiencyVermont\\_Triennial%20Plan2015-2017.pdf](http://psb.vermont.gov/sites/psb/files/EEU/EfficiencyVermont_Triennial%20Plan2015-2017.pdf)  
ENERGY STAR Partner since 1999
- *Program Administrator:* Burlington Electric Department: <https://www.burlingtonelectric.com/>  
Most recent program filing: <http://psb.vermont.gov/sites/psb/files/EEU/BED2015-17Triennialplan.pdf>  
ENERGY STAR Partner since 2002

## Other Key Stakeholders

### State Air Office:

- Vermont Air Quality & Climate Division of the Department of Environmental Conservation: <http://www.anr.state.vt.us/air/>

### State Energy Office:

- Vermont Department of Public Service: <http://publicservice.vermont.gov/>

### Consumer Advocate(s)

Most states also have one or more consumer advocacy organizations. Consumer Advocates are often concerned with maintaining low rates and ensuring equitable treatment of all customer classes<sup>9</sup>.

- Vermont Department of Public Service: <http://publicservice.vermont.gov/>

### Others Public Interest Groups

Groups representing environmental and other public interests are often involved in providing public input or technical expertise during regulatory proceedings or stakeholder processes. The following energy efficiency organizations/nonprofits are active in the state or region:

- Northeast Energy Efficiency Partnerships (NEEP): <http://www.neep.org/>
- Regional Greenhouse Gas Initiative: <http://www.rggi.org/>

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\* Revised December 21, 2015. To alert the U.S. EPA of substantial policy changes or program updates, please contact [eeaccountmanager@icfi.com](mailto:eeaccountmanager@icfi.com)

<sup>8</sup> For other energy efficiency program offerings in the state, visit: <http://programs.dsireusa.org/system/program?state=VT>

<sup>9</sup> Source: [EPA Energy and Environment Guide to Action](#)